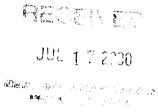
Verizon 1300 I Street, N.W. Washington, D.C. 20005 Voice 202 336-7890 Fax 202 336-7858 Fran Folgner Filing Manager



July 17, 2000



Mr. Dale Hatfield Chief – Office of Engineering and Technology Federal Communications Commission 445 12th Street, SW Room 7-C155 Washington, DC 20554

Re: Final Service Outage Report

Dear Mr. Hatfield:

In accordance with the requirements in CC Docket 91-273, enclosed is the Final Service Disruption Report for the Bell Atlantic service outage that occurred on June 18, 2000 affecting Southwest Philadelphia, PA.

Please call me if you have any questions about this report or other service outage issues.

Sincerely,

Enclosure

cc:

R. Kimball

K. Nilsson

WIRE LINE OUTAGE REPORTING TEMPLATE

Reporting Carrier	Date of Incident				
Bell Atlantic	06/18/2000				
Time of Incident	Geographic Area Affected				
15:15	Southwest Philadelphia, PA				
Services Affected	Number of Customers Affected				
	Estimated 82,600				
IntraLATA Intraoffice	Number of Blocked Calls				
IntraLATA Interoffice X.	44,000				
InterLATA Interoffice X	Outage Duration				
E911	6 Hrs 0 Min				
E911					
Background of the Incident					
On June 18 at 3:15 PM, the Optical Carrier	(OC) 48 between the Sherwood and				
Evergreen Central Offices (CO) experience					
Control Center (NCC) received multiple ala					
· · ·	,				
analysis, determined the OC 48 had failed.					
not being monitored in Network Management Analysis (NMA).					
The NCC dispatched technicians to both offices however, a technicians did not arrive					
at Evergreen until after 7:30 PM. At 8:00 PM, a decision was made to remove the fiber					
cable from the side two receiver on the multiplexer in Sherwood and "force switch" the					
node to side one. This occurred at approximately 8:30 PM and the NCC began to see					
the alarms clear. By 9:15 PM, all alarms cleared, restoring the OC48 to full service.					
Subsequent investigation has determined that on June 15, 2000, a plumbing contractor					
drilled and damaged the fiber cable that carries this OC48. The fiber cable continued to					
1					
degrade over the next three days, generating many alarm conditions on various systems					
that may have pointed to this imminent failure. Bell Atlantic personnel have been					
unable to determine exactly why the system did not switch to the protection channel in					
another cable. Analysis of the trouble pattern indicates the possibility that the light					
level was fluctuating causing the T1s to noise up and fail, but not enough to fail the					
1 ,					
receiver card and switch the multiplexer to the protect side.					
Direct Cause					
Cable Damage					
Root Cause					
Procedural – Service Provider – Insufficient Training					

Name and Type of Equipment NEC ITS-2400 OC48 Methods Used to Restore Service Specific Part of the Network Involved Interoffice Cable

Steps Taken to Prevent Recurrence of the Incident

The multiplexer was manually switched to the other side.

- Recently upgraded multiplexers (ITS-2400) not appearing in the NMA will be identified and necessary components ordered to insure connection to the alarm monitoring system.
- NCC technicians will be covered on the importance of log and trouble ticket entries on all troubles to establish clearer communications.

Evaluation of Best Practices

The following "Best Practice" recommended by the FCC's Network Reliability Council's publication, June 1993, *A Report to the Nation*, applies to this outage: Section A, Paragraph 6.1.1, Best practice to prevent fiber cable damage caused by digging.

The contractor did the call before digging and Bell Atlantic marked the cable location before the contractor drilled through the cable.

Another "Best Practice" recommended by the Network Reliability Council in their report "Network Reliability: A Report to the Nation," applies to this outage: Section B, Para.9.0 "Recommendations to Prevent Long Events."

Network personnel must be adequately trained in trouble detection and isolation processes as well as escalation procedures in order to reduce duration of the outage.

Contact Person	Telephone Number of Contact Person
Fran Folgner	202-336-7890

P.2/3 **P.02/03**

00-88

BELL ATLANTIC FCC NETWORK DISRUPTION INITIAL REPORT

TICKET #: BYG-Q5C

1.	DATE AND TIME O	F INCIDENT:	06/18/2000	00.45.00
2.	GEOGRAPHIC AR	EA AFFECTED;	Surrounding areas p	03:15:00 PM
3,	MAXIMUM NUMBE	R OF CUSTOMER		A Sherwood
		<u> </u>	AFFECTED;	
4.	TYPE OF SERVICE	S AFFECTED:	1.	
∏ EN	Mergency-service 🛭	INTERLATA :		
_] IN	TRALATA 🗆	800 SERVICES IN	Tier REP	
5.	DURATION OF OUT	AGE: 6 hrs 5	mins	
3.	ESTIMATED NUMB	ER OF BLOCKED	CALLS:	
Ά,	TYPE EQUIPMENT:	Fiber - Sonet Eq	uipment VEN	DOR:
'B.	APPARENT OR KNO	OWN CAUSE OF I	NCIDENTE:	
	Cable hit by contractor			
	METHOD USED TO	PESTODE CENT	Sepplied to	
		J. 199		
	CTERC TAKEN SO -		- FIL 1	,
•	STEPS TAKEN TO P	REVENT RECURP	RENCE	
u rs u onfid	ant to Section 0.459 (bontiality is requested) of the Commiss	ion Rules, and for rea	ison set forth below.
	n for confidentiality:	KEL.	Uha e e e	
A RE	iquest to supplement (Ited expeditiously.	he showing requ	ested by eaction 0.45	9 (b) is hereby made and wil
	-	\$3.55 \$1.55		<u>-</u>
que	st Supplement:			
TE	AND TIME OF REPORT	: 08/18/2000	pasification	
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NTA	CT AND TELEPHONE	#: Marianne Sweet	ney 800-699-6722	
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